



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,337	03/02/2005	Kenichi Nakamura	NAKA0102PUSA	8947
22045	7590	07/31/2008	EXAMINER	
BROOKS KUSHMAN P.C. 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075			HUYNH, KHOA D	
			ART UNIT	PAPER NUMBER
			3751	
			MAIL DATE	DELIVERY MODE
			07/31/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/526,337	Applicant(s) NAKAMURA ET AL.	
	Examiner Khoa D. Huynh	Art Unit 3751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/15/08 & 5/9/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 13-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings, especially the elected Figures, are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, a point near a point where the radius of curvature of the bowl changes from a smaller value to a larger value and a point near a point where the radius of curvature of the bowl changes from a larger value to a smaller value as recited in amended claim 4 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

Art Unit: 3751

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: a point near a point where the radius of curvature of the bowl changes from a smaller value to a larger value and a point near a point where the radius of curvature of the bowl changes from a larger value to a smaller value as recited in amended claim 4.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The amended claim 4 recites the limitations “a point near a point where the radius of curvature of the bowl changes from a smaller value to a larger value and a point near a point where the radius of curvature of the bowl changes from a larger value to a smaller value.” Such recitations render the claim indefinite since it does not have detailed supports in the original, instant specification. Since the claim does not clearly set forth the metes and bounds of the patent protection desired, the scope of the claim is unascertainable.

Regarding claim 1, the Groeniger reference discloses a flush toilet that uses a prescribed amount of cleansing water stored in a cleansing water tank to cleanse the toilet and discharge waste. The flush toilet includes a bowl (at 10) having a bowl-shaped waste receiving surface, a rim (*see above illustrations*)

constituting an upper edge portion whose inner surface overhangs inward and a shelf (*see above illustrations*) formed between the rim and the waste receiving surface (Fig. 2), and a drainage channel (at 15) whose inlet is connected to the bottom of the bowl for discharging waste. A first water spouting section (at 32a on the left side) for spouting cleansing water onto the shelf of the bowl to form a vortex; a second water spouting section (at 32a on the right side) for spouting cleansing water onto shelf of the bowl in the same direction as the swirling direction of the vortex; a first water channel (at 32 on the left side) for supplying cleansing water from the cleansing water tank to the first water spouting section; and a second water channel (at 32 on the right side) for supplying cleansing water from the cleansing water tank to the second water spouting section.

Regarding claim 2, as schematically shown in Figure 1, the second water channel makes a U-turn to communicate with the second water spouting section.

Regarding claims 3 and 8, the flush toilet further comprises a jet hole section (at 35) arranged to spout water toward the inlet (at 15b) of the drainage channel, wherein the amount of water spouted from the jet hole section is greater than the total amount of water spouted at the rim from the first water spouting section and second water spouting section (page 3, lines 13-17).

Regarding claims 4 and 5 (as best understood), as schematically shown in Figure 1, wherein the first water spouting section is installed on one side of the bowl relative to its fore-aft center axis at a point near a point where the radius of curvature of the bowl changes from a smaller value to a larger value and the

Art Unit: 3751

second water spouting section is installed on the other side of the bowl at a point near a point where the radius of curvature of the bowl changes from a larger value to a smaller value, and wherein the amount of water spouted at the rim from the first water spouting section is inherently greater than the amount of water spouted at the rim from second water spouting section.

Regarding claims 10 and 11, as schematically shown in Figure 1, wherein the shelf of the bowl is formed to vary in width in a manner that causes the main stream of the cleansing water spouted the first water spouting section to flow toward the inlet of the drainage channel, wherein the width of the shelf of the bowl is formed wider at regions on opposite lateral sides of the bowl relative to its fore-aft center axis and formed narrower at the front end region of the bowl.

Claims 18 presumable recites limitations that are substantially similar to the limitations recited in claims 1 and 5 which have been rejected as discussed *supra*.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6, 7, 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Groeniger (as discussed *supra*).

Regarding claims 6, even though the Groeniger reference does not specifically disclose that the amount of water from 0.6 to 2.3 liters spouted from the spouting sections as claimed, it, however, would have been obvious to one of ordinary skill in the art at the time the invention was made to employ such amount of water for the spouting sections since discovering an optimum value for water flow of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claims 7, even though the Groeniger reference does not specifically disclose that the amount of spouted water of at least 1 liter as claimed, it, however, would have been obvious to one of ordinary skill in the art at the time the invention was made to employ such amount of water for the spouting sections since discovering an optimum value for water flow of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claims 9, even though the Groeniger reference does not specifically disclose that the capacity of the water tank is 6 liters, the amount of spouted water from 1-3 liters from the spouting sections, and the amount of water from the jet hole is 5-3 liters as claimed, it, however, would have been obvious to one of ordinary skill in the art at the time the invention was made to employ such amount of water for the tank, spouting sections and the jet hole since discovering an optimum value for water flow of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 12, as schematically shown in Figure 2, the shelf of the bowl (constituted by the slope portion at 10) is sloped downward. Even though the Groeniger reference does not specifically disclose that the angle of inclination of 0 to 15 degrees as claimed, it, however, would have been obvious to one of ordinary skill in the art at the time the invention was made to employ such angle of inclination for the shelf of the bowl since discovering an optimum value for a downward angle of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Response to Amendment

9. Applicant's amendment, filed on 04/15/2008, to the pending claims is insufficient to distinguish the claimed invention from the cited prior art or overcome the rejections as discussed above.

Response to Arguments

10. Applicant's arguments filed on 04/15/2008 with respect to the pending claims have been fully considered. However, they are deemed not persuasive.

Applicant asserts that the Groeniger reference does not teach the shelf. Applicant also asserts that "the shelf limitation ...is not given consideration". See Remarks section, page 7, 3rd paragraph. The examiner disagrees.

Firstly, the "shelf limitations" have been fully reviewed. Claim 1, as presented, simply recites that "a shelf formed between the rim and the waste receiving surface. It is noted that applicant does not provide any detailed structural limitation defining the "shelf" which patentably distinguishes over the shelf structure of the Groeniger

Art Unit: 3751

reference. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

And lastly, as shown in *the above illustration* and stated in the above rejection, does disclose a flush toilet including a bowl (at 10) having a bowl-shaped waste receiving surface, a rim, a shelf (*the above illustration show a structure resembles a flat structure extending from a surface 35c*) formed between the rim and the waste receiving surface (Fig. 2), a first water spouting section (*at 32a on the left side*) for spouting cleansing water onto the shelf of the bowl to form a vortex; a second water spouting section (*at 32a on the right side*) for spouting cleansing water onto shelf of the bowl in the same direction as the swirling direction of the vortex.

Therefore, the Groeniger reference does teach applicant's invention as claimed.

Applicant also asserts that the amended limitations of claim 4 are illustrated in Figs. 13-15 and found in corresponding text on lines 12-21 on page 21 of the specification. The examiner disagrees. Figures 13-15 do not illustrate the amended limitations of claim 4, and the corresponding text on lines 12-21 on page 21 described Figures 19-25 which are directed to the non-elected embodiment.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khoa D. Huynh whose telephone number is (571) 272-4888. The examiner can normally be reached on M-F (7:00-3:30).

Art Unit: 3751

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Khoa D. Huynh/
Primary Examiner, Art Unit 3751